

AM-421 – 9 V DC valve controller

- ✓ support for up to four 9 V DC solenoid valves
- ✓ wireless communication with the control application
- ✓ battery powered
- ✓ easy programming of irrigation schedules
- ✓ water saving thanks to cooperation with soil probes and taking into account real soil conditions
- ✓ notifications about irregularities in the implementation of the schedule

The AM-421 9 V DC valve controller is a device dedicated to irrigation of agricultural, horticultural, forestry and green areas.

The controller is battery powered and is adapted to control four solenoid valve coils supplied with a voltage of 9 V DC. The outputs are controlled wirelessly, using the AGREUS® Portal, which allows the user to control valves both manually and automatically.

Cooperation with soil probes allows for automatic modification of irrigation schedules by taking into account the actual soil conditions – the possibility of suspending the schedule at optimal soil moisture.

KEY FEATURES

- Wireless – data and commands are transmitted via Semtech LoRa®, therefore is no risk of damaging the wiring by agricultural machinery or animals,
- Battery powered – the possibility of automating irrigation in quartets without access to a power source,
- Controlling range up to several kilometers (depending on the topography and terrain covering, as well as the module installation site),
- Capable to connect up to 4 solenoid valve coils,
- Capable to independently define schedules for each of the outputs,
- Automatic modification of schedules by analyzing measurement data received from soil probes – saving water and electricity by optimizing the amount of water used,
- Notifications about irregularities in the execution of commands to open or close valve outputs sent via the mobile application, e-mail or SMS,
- Environmental conditions immunity IP 65 means reliable operation regardless of weather conditions,
- Visual signaling informing the user about the module status, i.e. whether it is active, and which outputs are open.



AM-421 – 9 V DC valve controller

Technical data

General

- Dimensions: 28 x 70 x 64.8 mm
- Weight: 120 g
- Mounting method: a two-piece Velcro in valve box
- Working temperature: -20 to +50 °C
- Relative humidity: 95%, non-condensing
- Protection class: IP 65

Radio modem

- Radio technology: Semtech LoRa®
- Working channel frequency: 869.5 MHz
- Working channel band: 125 kHz
- Maximum transmit power: 25 mW
- Receiver sensitivity: -133.5 dBm
- Antenna: built-in

Power supply

- DC voltage: dedicated battery pack

Pulse outputs

- Compatible with valves from all leading manufacturers
- Outputs adapted to control the coils of 9 V DC solenoid valves
- Number of outputs: 4 pcs.
- Operating voltage of the output: 9 V DC
- Switching pulse time: 100 ms
- Switching pulse current: approx. 0.7 A

